

**AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**

In compliance with the provisions of the Federal Clean Water Act as amended, (33 U.S.C. §§1251 et seq.; the "CWA"), and the Massachusetts Clean Waters Act, as amended, (M.G.L. Chap. 21, §§26-53),

Hollingsworth and Vose Company

is authorized to discharge from the facility located at

**Hollingsworth and Vose Company
112 Washington Street
East Walpole, MA 02032**

to receiving water named **Neponset River** -73 NEPO

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective 60 days after date of signature.

This permit and the authorization to discharge expire at midnight September 30, 2006.

This permit supersedes the permit issued on May 3, 2001.

This permit consists of 8 pages in Part I including effluent limitations, monitoring requirements, Attachments A, Freshwater Chronic Toxicity Test Protocol & Procedures, and 35 pages in Part II including General Conditions and Definitions.

Signed this 18th day of April, 2003

/Signature on File/

Director
Office of Ecosystem Protection
Environmental Protection Agency
Boston, MA

Director
Division of Watershed Management
Department of Environmental Protection
Commonwealth of Massachusetts
Boston, MA

PART I

A.1. During the period beginning the effective date and lasting through expiration, the permittee is authorized to discharge from outfall serial number **002,*** treated effluent from strainer backwash to Neponset River. Such discharges shall be limited and monitored as specified below.

<u>EFFLUENT CHARACTERISTIC</u>		<u>EFFLUENT LIMITS</u>			<u>MONITORING REQUIREMENTS</u>		
PARAMETER	<u>AVERAGE MONTHLY</u>	<u>AVERAGE WEEKLY</u>	<u>AVERAGE MONTHLY</u>	<u>AVERAGE WEEKLY</u>	<u>MAXIMUM DAILY</u>	<u>MEASUREMENT FREQUENCY</u>	<u>SAMPLE² TYPE</u>
FLOW ⁴	0.004	*****	*****	*****	Report	DAILY	ESTIMATE
TOTAL SUSPENDED SOLIDS (TSS)	20 mg/l	***** *	*****	*****	30 mg/l	1/MONTH	GRAB
pH RANGE ³	6.5 - 8.3 SU See Permit Page 6 of 7, Paragraph I.A.1.b.					1/MONTH	GRAB

Sampling for effluent parameters shall be conducted at the strainers' overflow tank after treatment and before it reaches the Neponset River.

* Outfall 001 was from a sand filter backwash discontinued from use in the 1980's.

PART I

A.1. During the period beginning the effective date and lasting through expiration, the permittee is authorized to discharge from outfall serial number **003**, treated effluent from boilers and from paper machines # 2 and # 3 to Neponset River¹. Such discharges shall be limited and monitored as specified below.

<u>EFFLUENT CHARACTERISTIC</u>		<u>EFFLUENT LIMITS</u>			<u>MONITORING REQUIREMENTS</u>		
PARAMETER	<u>AVERAGE MONTHLY</u>	<u>AVERAGE WEEKLY</u>	<u>AVERAGE MONTHLY</u>	<u>AVERAGE WEEKLY</u>	MAXIMUM DAILY	MEASUREMENT FREQUENCY	SAMPLE² TYPE
FLOW ⁴	0.7 MGD	*****	*****	*****	Report MGD	DAILY	RECORDER
BOD ₅	*****	*****	20 mg/l	*****	30 mg/l	1/WEEK	COMPOSITE ⁷
TSS	*****	*****	20 mg/l	*****	30 mg/l	1/WEEK	COMPOSITE ⁷
TEMPERATURE ^{3, 8}	*****	*****	*****	*****	83 ⁰ F	1/DAY	GRAB
TOTAL PHOSPHORUS	*****	*****	0.1	*****	Report mg/l	1/WEEK	COMPOSITE ⁷
TOTAL RECOVERABLE ZINC ⁶	*****	*****	43 ug/l	*****	43 ug/l	1/MONTH	GRAB
pH RANGE ³	6.5 - 8.3 SU See Permit Page 6 of 7, Paragraph I.A.1.b.					1/DAY	GRAB
DISSOLVED OXYGEN ⁵ (April 1 st -October 31 st)	NOT LESS THAN 5.0 mg/l					1/DAY	GRAB
WHOLE EFFLUENT TOXICITY- SEE FOOTNOTES 9,10,11&12	Acute LC ₅₀ \$ 100% Chronic C-NOEC \$ 25%					4/YEAR	COMPOSITE ⁷

The Discharge shall be tested at a point after wastewater treatment plant outlet prior to entering into the Neponset River.

Footnotes:

1. The permittee is required to notify EPA and DEP at least ninety (90) days prior to initiating construction of the new WWTP, and at least ninety (90) days **prior to** discharge from Outfall No. # 003. The notification will describe any changes in the characteristics of the wastewater to be discharged by the facility (i.e. increased or different pollutants since the time of application) and confirm that the treatment plant is adequate to achieve the effluent limits in the permit. If the notification reveals significant changes to effluent quality, or if new water quality or information on the Neponset River shows that new or more stringent effluent limitations are necessary to achieve water quality standards, this permit will be reopened and modified.
2. All required effluent samples shall be collected at the point specified in permit Pages 2 and 3. Any change in sampling location must be reviewed and approved in writing by EPA and MADEP. All samples shall be tested using the analytical methods found in 40 CFR §136, or alternative methods approved by EPA in accordance with the procedures in 40 CFR §136. All samples shall be 24 hour composites unless specified as a grab sample in 40 CFR §136.
3. Required for State Certification.
4. Flow reporting. For Outfall # 002: Estimate daily average and total flow. For Outfall # 003, report maximum and minimum daily rates and total flow for each operating date.
5. Maintain a minimum of 5 mg/l at all times.
6. Samples shall be representative of typical zinc concentrations and shall be taken during periods when zinc is being used in the papermaking process.
7. A composite sample will consist of at least twenty four (24) grab samples taken during one working day.
8. Temperature of the discharge shall not exceed 83° F (28.3° C) and the rise in temperature of the stream due to the discharge shall not exceed 5° F (2.8° C).
9. The permittee shall conduct chronic (and modified acute) toxicity tests four times per year. The chronic test may be used to calculate the acute LC₅₀ at the 48 hour exposure interval. The permittee shall test the Daphnid (Ceriodaphnia dubia) and Fathead Minnow (Pimephales promelas). Tests samples shall be collected and results submitted according to the schedule in the following table.

Test Dates Second week in	Submit Results By:	Test Species	Acute Limit LC ₅₀	Chronic Limit C-NOEC
February May August November	March 30 th June 30 th September 30 th December 30 th	Fathead Minnow (Pimephales <u>promelas</u>) and <u>Ceriodaphnia</u> <u>dubia</u> (Daphnid)	\$ 100%	\$ 25%

After submitting four consecutive sets of WET test results, all of which demonstrate compliance with the WET permit limits, the permittee may request a reduction in the frequency of required WET testing. The permittee is required to continue testing at the frequency specified in the permit until notice is received by certified mail from the EPA that the WET testing requirement has been changed.

10. The LC₅₀ is the concentration of effluent which causes mortality to 50% of the test organisms. Therefore, a 100% limit means that a sample of 100% effluent (no dilution) shall cause no more than a 50% mortality rate.
11. C-NOEC (chronic-no observed effect concentration) is defined as the highest concentration of toxicant or effluent to which organisms are exposed in a life cycle or partial life cycle test which causes no adverse effect on growth, survival, or reproduction at a specific time of observation as determined from hypothesis testing where the test results exhibit a linear dose-response relationship. However, where the test results do not exhibit a linear dose-response relationship, the permittee must report the lowest concentration where there is no observable effect. The "25% or greater" limit is defined as a sample which is composed of 25% (or greater) effluent, the remainder being dilution water. This is a maximum daily limit derived as a percentage of the inverse of the dilution factor of 4.
12. If toxicity test(s) using receiving water as diluent show the receiving water to be toxic or unreliable, the permittee shall follow procedures outlined in the **Toxicity Testing Procedures and Protocol, Section IV., DILUTION WATER** in order to obtain permission to use an alternate dilution water. In lieu of individual approvals for alternate dilution water required in **Attachment A**, EPA-New England has developed a Self-Implementing Alternative Dilution Water Guidance document (called "Guidance Document") which may be used to obtain automatic approval of an alternate dilution water, including the appropriate species for use with that water. If this Guidance document is revoked, the permittee shall revert to obtaining approval as outlined in **Attachment A**. The "Guidance Document" has been sent to all permittees with their annual set of DMRs and Revised Updated Instructions for Completing EPA's Pre-Printed NPDES Discharge Monitoring Report (DMR) Form 3320-1 and is not intended as a direct attachment to this permit. Any modification or revocation to this "Guidance Document" will be transmitted

to the permittees as part of the annual DMR instruction package. However, at any time, the permittee may choose to contact EPA-New England directly using the approach outlined in **Attachment A**

Part I.A.1 (Continued)

- a. The discharges shall not cause a violation of the water quality standards of the receiving waters.
 - b. The pH of the discharges shall not be less than 6.5 nor greater than 8.3 at any time, unless these values are exceeded as a result of an approved treatment process.
 - c. The discharges shall not cause objectionable discoloration of the receiving waters.
 - d. The discharges shall contain neither a visible oil sheen, foam, nor floating solids at any time.
2. The permittee must notify the Director as soon as they know or have reason to believe:
- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit.
 - b. That they have begun or expect to begin to use a product containing toxic pollutant which was not reported in the permit application.
3. Toxics Control
- a. The permittee shall not discharge any pollutant or combination of pollutants in toxic amounts.
 - b. Any toxic components of the effluent shall not result in any demonstrable harm to aquatic life or violate any state or federal water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this permit may be revised or amended in accordance with such standards.

B. UNAUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with the terms and conditions of this permit and only from outfalls listed in Part I A.1. of this permit. Discharges of wastewater from any other point sources, are not authorized by this permit and shall be reported in accordance with Section D.1.e. (1) of the General Requirements of this permit (Twenty-four hour reporting).

C. MONITORING AND REPORTING

1. Reporting

Monitoring results obtained during each calendar month shall be summarized and reported on Discharge Monitoring Report Form(s) postmarked no later than the **15th day of the following month.**

Signed and dated originals of these, and all other reports required herein, shall be submitted to the Director and the State at the following addresses:

Environmental Protection Agency
Water Technical Unit (SEW)
P.O. Box 8127
Boston, Massachusetts 02114

The State Agency is:

Massachusetts Department of Environmental Protection
Northeast Regional Office - Bureau of Waste Prevention
1 Winter Street
Boston, MA 02108

Signed and dated Discharge Monitoring Report Forms and toxicity test reports required by this permit shall also be submitted to the State at:

Massachusetts Department of Environmental Protection
Division of Watershed Management
Surface Water Discharge Permit Program
627 Main Street, 2nd Floor
Worcester, Massachusetts 01608

D. STATE PERMIT CONDITIONS

This Discharge Permit is issued jointly by the U. S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (DEP) under Federal and State law, respectively. As such, all the terms and conditions of this permit are hereby incorporated into and constitute a discharge permit issued by the Commissioner of the MA DEP pursuant to M.G.L. Chap.21, §43.

Each Agency shall have the independent right to enforce the terms and conditions of this Permit. Any modification, suspension or revocation of this Permit shall be effective only with respect to the Agency taking such action, and shall not affect the validity or status of this Permit as issued by the other Agency, unless and until each Agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this Permit is declared, invalid, illegal or otherwise issued in violation of State law such permit shall remain in full force and effect under Federal law as an NPDES Permit issued by the U.S. Environmental Protection Agency. In the event this Permit is declared invalid, illegal or otherwise issued in violation of Federal law, this Permit shall remain in full force and effect under State law as a Permit issued by the Commonwealth of Massachusetts.